

What is claimed is:

1. A text to speech synthesizer, comprising:

a text analyzer for analyzing Japanese text data; a facial character reading assignment unit for assigning facial character readings to character string portions of
5 text analysis results determined to correspond to facial characters; and

a speech synthesizer for outputting synthesized speech based on the analysis results of the text analyzer,

wherein the facial character reading assignment unit is constituted by; a facial character determining unit for determining whether or not a symbol is a symbol

10 constituting a facial character using an outline symbol table, a characteristic extraction unit for extracting characteristic symbols used in facial characters from facial character strings determined to be for facial characters and assigning facial characters corresponding to characteristic symbols, and a reading selection unit for outputting readings allotted to extracted reading numbers, with readings being allotted to the facial
15 character strings according to the number of appearances of characteristic symbols in the facial characters.

2. The text to speech synthesizer of claim 1, wherein the facial character reading assignment unit decides upon readings for facial characters using the steps of:

20 (a) scanning the text and detecting a left outline symbol listed in the outline symbol table,

(b) detecting a right outline symbol within a range of a prescribed number of characters if a left outline symbol is detected,

(c) extracting symbols exhibiting characteristics of eyes from a character string portion encompassed by the left outline symbol and the right outline symbol, and

25 (d) referring to the characteristic symbol table and the reading table, and

deciding upon a corresponding facial character reading from readings for characters exhibiting eyes.

3. A text to speech synthesizer, comprising:

a text analyzer for analyzing Japanese text data;

5 a facial character reading assignment unit for assigning facial character readings to character string portions of text analysis results determined to correspond to facial characters; and

a speech synthesizer for outputting synthesized speech based on the analysis results of the text analyzer,

10 wherein the facial character reading assignment unit is constituted by a facial character determining unit for determining whether or not a symbol is a symbol constituting a facial character using an outline symbol table, a characteristic extraction unit for extracting characteristic symbols used in facial characters using a characteristic symbol table from character strings determined to be facial characters, and a reading selection unit for selecting and outputting readings for typical vectors most similar to the extracted frequency vectors,

the characteristic symbol table consists of characteristic symbols and number of groups the characteristic symbols belong to, and

20 the characteristic extraction unit comprises a frequency vector calculator for calculating frequencies of characteristic symbols within the facial characters and making frequency vectors and a normalization processor for normalizing the frequency vectors.

4. The text to speech synthesizer of claim 3, wherein the facial character reading assignment unit decides upon readings for facial characters using the steps of:

25 (a) scanning the text and detecting a left outline symbol and right outline

symbol,

(b) extracting characteristic symbols used in facial characters from character strings encompassed by the left outline symbol and the right outline symbol,

5 (c) extracting and normalizing frequency vectors indicating numbers of appearances of the characteristic symbols,

(d) selecting typical vectors most similar to the normalized frequency vectors, and

(e) taking readings allotted to the typical vectors as facial character readings.

5. A text to speech synthesizer, comprising:

10 a text analyzer for analyzing Japanese text data; a facial character reading assignment unit for assigning facial character readings to character string portions of text analysis results determined to correspond to facial characters; and

a speech synthesizer for outputting synthesized speech based on the analysis results of the text analyzer,

15 wherein the facial character reading assignment unit is constituted by a facial character determining unit for determining whether or not a symbol is a symbol constituting a facial character using an outline symbol table, a characteristic extraction unit for extracting characteristic symbols used in facial characters using a characteristic symbol table from character strings determined to be facial characters, and a reading

20 selection unit for selecting and outputting readings for typical vectors most similar to the extracted frequency vectors,

the characteristic symbol table is lined up based on similarities between shape characteristics, and

the characteristic extraction unit comprises a frequency vector calculate for

25 calculating frequency of characteristic symbols within the facial characters and

extracting frequency vectors and a normalization processor for normalizing frequency vectors.

6. The text to speech synthesizer of claim 5, wherein the facial character reading assignment unit decides upon readings for facial characters using the steps of:

5 (a) scanning the text and detecting a left outline symbol and right outline symbol,

 (b) extracting characteristic symbols used in facial characters from character strings encompassed by the left outline symbol and the right outline symbol,

 (c) extracting and frequency vectors indicating numbers of appearances of the

10 characteristic symbols and normalizing the frequency vectors after filtering processing,

 (d) selecting typical vectors most similar to the normalized frequency vectors, and

 (e) taking readings allotted to the typical vectors as facial character readings.

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